

AMENDMENTS TO THE SPECIFICATION

Errors cited by Examiner as well as other typographical errors in the paragraphs as follows are corrected by the amendments to the specification.

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Please replace the paragraph [0006] with the following amended paragraph.

[0006] The data on the optical disc 22 is recorded sequentially onto a track 24 through
10 pit and land markings. When the optical disc drive 10 is ready to write data onto the
optical disc 22, first the optical disc drive 10 ~~stores~~ stores the intended data in the
memory 20 before writing the intended data onto the optical disc 22. The read/write
head 16 meanwhile checks for defects in the optical disc 22, and passes the check
results back to control circuit 18.

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Please replace the paragraph [0009] with the following amended paragraph.

[0009] All data blocks have a fixed address, which is designated by a certain number
20 to identify a location on the track 24. To write user data ~~onto an the~~ onto the optical
disc 22 as specified in Fig.2A, the optical drive 10 treats each data block as a basic
data unit, writing data onto each data block within a Data Area in an orderly fashion.
For example, when every data block in DA(1) comprises user data, any subsequent
data would be directed to available data blocks in DA(2) as needed. However, should
25 a data block be defective during a write-in, an available spare data block would
become the location for data storage. If the spare data block turns out to be defective
as well during the write-in, then another available Bd is located for the original data
storage. By applying this format and method of operation, an accurate data write-in is
guaranteed, and the data storage capability of the optical disc 22 is not compromised
30 due to a defective area.

Please replace the paragraph [0015] with the following amended paragraph.

[0015] On the other hand, the optical disc drive 10 writing data onto the optical disc 22 requires updating the DT in temporary storage in memory 20 accordingly. For instance, assume that during the write-in the optical disc drive 10 discovers that a user data block is defective. The optical disc drive 10 then 10 then has to locate another unused spare data block for data storage. The optical disc drive 10 locates an unused entry in the ~~DT~~. The DT. The address of an unused spare data block is recorded in the unused entry and the unused entry is changed into a used entry (by changing the status indicator). The address of the defective data block is recorded in the entry, thus storing a complete corresponding relationship between the defective user data block and the spare data block. As a result, the DT temporarily stored in the memory 20 is updated as well. When the optical disc drive 10 stops accessing data on the optical disc 22 (as in the case of ejecting the optical disc 22), the optical disc drive 10 writes the updated DT from the memory 20 onto the optical disc 22. This updated DT provides the reference that the optical disc drive 10 needs when it tries to access data on the optical disc 22 the next time around.

Please replace the paragraph [0016] with the following amended paragraph.

[0016] To facilitate searching for a spare data block in replacing a defective data block by the optical disc drive 10, used entries are sorted according to the recorded address of the data blocks. As illustrated in Fig.2B, in the ~~DA(n)~~ of DA(n) of the track 24 there is an ascending order of addresses of the data blocks DN6, DN7, and DN8, which means $DN8 > DN7 > DN6$. If all three of these user data blocks are defective and require replacement by spare data blocks, the DT used-entries that store the addresses for all three data blocks would be sorted out in order as illustrated in the DTB(n) of Fig.2B. Similarly, the block DTB(n+1) that corresponds to DA(n+1) in the DTB is sorted as well in accordance with the address of DN11 and DN12.

Please replace the paragraph [0044] with the following amended paragraph.

[0044] In other words, the present invention is about categorically storing a newly

established used-entry in Z2 (temporarily) during a data write-in onto the optical disc 22, and sorting all new used-entries according to their defect data block addresses.

However, these new used-entries remain separate (and unsorted) from their counterparts in Z1a. Only when the optical disc drive 30 stops writing data onto the optical disc 22 (as when ejecting the optical disc 22), the control circuit 38 combines the new used-entries in Z2 with the used-entries in Z1a. During the converging process, all of the used-entries in Z1a and Z2 re-sorted together. Fig. 7E illustrates the result of the re-sorting where every entry in Z1a, Z1b, and ~~Z1c~~ Z1c are placed in the original DTB updating the DT and written back onto the optical disc—thus

10 completing the process for defect recording and management.